SEQUENCE LISTING

<110> The Government of the United States of America as represented by the Secretary of the Department of Health and Human Services
Moss, Joel
Stevens, Linda
Bourgeois, Christelle
Bortell, Rita

<120> TRYPTOPHAN AS A FUNCTIONAL REPLACEMENT FOR ADP-RIBOSE-ARGININE IN RECOMBINANT PROTEINS

<130> 4239-64830

<150> 60/393,033
<151> 2002-06-28

<160> 22

<170> PatentIn version 3.1

<210> 1
<211> 94
<212> PRT
<213> Homo sapiens

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Met Arg Thr Leu Ala Ile Leu Ala Ala Ile Leu Leu Val Ala Leu Gln
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Ala Gln Ala Glu Pro Leu Gln Ala Arg Ala Asp Glu Val Ala Ala Ala
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Pro Glu Gln Ile Ala Ala Asp Ile Pro Glu Val Val Val Ser Leu Ala
35 40 45

Trp Asp Glu Ser Leu Ala Pro Lys His Pro Gly Ser Arg Lys Asn Met
50 55 60

Asp Cys Tyr Cys Arg Ile Pro Ala Cys Ile Ala Gly Glu Arg Arg Tyr
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Gly Thr Cys Ile Tyr Gln Gly Arg Leu Trp Ala Phe Cys Cys
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Val Arg Ala Gly Pro Leu Gln Ala Arg Gly Asp Glu Ala Gly Gln Glu
20 25 30

Gln Arg Gly Pro Glu Asp Gln Asp Ile Ser Ile Ser Phe Ala Trp Asp
35 40 45

Lys Ser Ser Ala Leu Gln Val Ser Gly Ser Thr Arg Gly Met Val Cys
50 55 60

Ser Cys Arg Leu Val Phe Cys Arg Arg Thr Glu Leu Arg Val Gly Asn
65 70 75 80

Cys Leu Ile Gly Gly Val Ser Phe Thr Tyr Cys Cys Thr Arg Val Asp
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Val Asp

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Met Arg Thr Ile Ala Ile Leu Ala Ala Ile Leu Leu Val Ala Leu Gln
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Ala Gln Ala Glu Ser Leu Gln Glu Arg Ala Asp Glu Ala Thr Thr Gln
20 25 30

Lys Gln Ser Gly Glu Asp Asn Gln Asp Leu Ala Ile Ser Phe Ala Gly
35 40 45

Asn Gly Leu Ser Ala Leu Arg Thr Ser Gly Ser Gln Ala Arg Ala Thr
50 55 60

Cys Tyr Cys Arg Thr Gly Arg Cys Ala Thr Arg Glu Ser Leu Ser Gly
65 70 75 80

Val Cys Glu Ile Ser Gly Arg Leu Tyr Arg Leu Cys Cys Arg
85 90

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Ala Lys Ala Glu Pro Leu Gln Ala Glu Asp Asp Pro Leu Gln Ala Lys
20 25 30

Ala Tyr Glu Ala Asp Ala Gln Glu Gln Arg Gly Ala Asn Asp Gln Asp
35 40 45

Phe Ala Val Ser Phe Ala Glu Asp Ala Ser Ser Ser Leu Arg Ala Leu
50 55 60

Gly Ser Thr Arg Ala Phe Thr Cys His Cys Arg Arg Ser Cys Tyr Ser
65 70 75 80

Thr Glu Tyr Ser Tyr Gly Thr Cys Thr Val Met Gly Ile Asn His Arg
85 90 95

Phe Cys Cys Leu
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Thr Cys His Cys Arg Arg Ser Cys Tyr Ser Thr Glu Tyr Ser Tyr Gly
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Met Pro Ser Asn Ile Cys Lys Phe Phe Leu Thr Trp Trp Leu Ile Gln
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Gln Val Thr Gly Leu Thr Gly Pro Leu Met Leu Asp Thr Ala Pro Asn
20 25 30

Ala Phe Asp Asp Gln Tyr Glu Gly Cys Val Asn Lys Met Glu Glu Lys
35 40 45

Ala Pro Leu Leu Leu Lys Glu Asp Phe Asn Lys Ser Glu Lys Leu Lys
50 55 60

Val Ala Trp Glu Glu Ala Lys Lys Arg Trp Asn Asn Ile Lys Pro Ser
65 70 75 80

Met Ser Tyr Pro Lys Gly Phe Asn Asp Phe His Gly Thr Ala Leu Val
85 90 95

Ala Tyr Thr Gly Ser Ile Gly Val Asp Phe Asn Arg Ala Val Arg Glu
100 105 110

Phe Lys Glu Asn Pro Gly Gln Phe His Tyr Lys Ala Phe His Tyr Tyr
115 120 125

Leu Thr Arg Ala Leu Gln Leu Leu Ser Asn Gly Asp Cys His Ser Val
130 135 140

Tyr Arg Gly Thr Lys Thr Arg Phe His Tyr Thr Gly Ala Gly Ser Val
145 150 155 160

Arg Phe Gly Gln Phe Thr Ser Ser Ser Leu Ser Lys Thr Val Ala Gln
165 170 175

Ser Pro Glu Phe Phe Ser Asp Asp Gly Thr Leu Phe Ile Ile Lys Thr
180 185 190

Cys Leu Gly Val Tyr Ile Lys Glu Phe Ser Phe Tyr Pro Asp Gln Glu
195 200 205

Glu Val Leu Ile Pro Gly Tyr Glu Val Tyr Gln Lys Val Arg Thr Gln
210 215 220

Gly Tyr Asn Glu Ile Phe Leu Asp Ser Pro Lys Arg Lys Lys Ser Asn
225 230 235 240

Tyr Asn Cys Leu Tyr Ser Ser Ala Gly Thr Arg Glu Ser Cys Val Ser
245 250 255

Leu Phe Leu Val Val Leu Thr Ser Leu Leu Val Gln Leu Leu Cys Leu
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Ala Glu Pro
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<210> 12
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Met Pro Ser Asn Ile Cys Lys Phe Phe Leu Thr Trp Trp Leu Ile Gln
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Gln Val Thr Gly Leu Thr Gly Pro Leu Met Leu Asp Thr Ala Pro Asn
20 25 30

Ala Phe Asp Asp Gln Tyr Glu Gly Cys Val Asn Lys Met Glu Glu Lys
35 40 45

Ala Pro Leu Leu Leu Gln Glu Asp Phe Asn Met Asn Ala Lys Leu Lys
50 55 60

Val Ala Trp Glu Glu Ala Lys Lys Arg Trp Asn Asn Ile Lys Pro Ser
65 70 75 80

Arg Ser Tyr Pro Lys Gly Phe Asn Asp Phe His Gly Thr Ala Leu Val
85 90 95

Ala Tyr Thr Gly Ser Ile Ala Val Asp Phe Asn Arg Ala Val Arg Glu
100 105 110

Phe Lys Glu Asn Pro Gly Gln Phe His Tyr Lys Ala Phe His Tyr Tyr
115 120 125

Leu Thr Arg Ala Leu Gln Leu Leu Ser Asn Gly Asp Cys His Ser Val
130 135 140

Tyr Arg Gly Thr Lys Thr Arg Phe His Tyr Thr Gly Ala Gly Ser Val

145 150 155 160

Arg Phe Gly Gln Phe Thr Ser Ser Ser Leu Ser Lys Lys Val Ala Gln
165 170 175

Ser Gln Glu Phe Phe Ser Asp His Gly Thr Leu Phe Ile Ile Lys Thr
180 185 190

Cys Leu Gly Val Tyr Ile Lys Glu Phe Ser Phe Arg Pro Asp Gln Glu
195 200 205

Glu Val Leu Ile Pro Gly Tyr Glu Val Tyr Gln Lys Val Arg Thr Gln
210 215 220

Gly Tyr Asn Glu Ile Phe Leu Asp Ser Pro Lys Arg Lys Lys Ser Asn
225 230 235 240

Tyr Asn Cys Leu Tyr Ser Ser Ala Gly Ala Arg Glu Ser Cys Val Ser
245 250 255

Leu Phe Leu Val Val Leu Pro Ser Leu Leu Val Gln Leu Leu Cys Leu
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Ala Glu Pro
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